APA Citation:


Audience:

The *International Journal of Applied Research in Veterinary Medicine* is intended for researchers and practicing veterinarians. This audience includes Proheart 6’s manufacturers and the practicing veterinarians who would use the product on their patients.

**Safety profile of moxidectin (Proheart 6) and two oral heartworm preventives in dogs**

The article focuses on the safety of Proheart 6 when compared to two other accepted forms of heartworm prevention. The researchers used records from Banfield Animal Hospital, a chain hospital, in order to get a large amount of information. This information was broken into four groups and each group was divided into two subgroups: a) Proheart 6, b) Oral heartworm preventive 1, c) oral heartworm preventive 2, and d) no heartworm preventive. Those groups were divided into subgroups of vaccinated and non vaccinated animals. Using the data obtained from Banfield's hard drive, researchers were able to conclude that while there was an increase in mast cell tumors at the application site of the Proheart 6 group, the increase was not comparable to the group without any heartworm prevention. They also saw an increase in liver problems reported when compared to the oral preventatives. The main reason for the study, however, was to see if death rates as a result of Proheart 6 were increased. Among the three preventives the researchers found that Proheart 6 had the lowest risk of death.

This research was essential due to the history of the drug. After the drug was released, a large number of problems were reported to the FDA. In August 2004, Proheart 6 was voluntarily taken off the market by its maker in order to collect more information about the safety of the product. Due largely to this study, Proheart 6 is being reintroduced to the market. This study was performed to inform the pharmaceutical company of its risk for market reintroduction of the drug. This information also is useful to veterinary practitioners because they can use the information to analyze their willingness to begin using the product again. The researchers allowed much bias throughout the study, letting many factors go uncontrolled, but the point of the study was not to control every aspect; the main function was to show the drug’s safety in real world conditions, which the researchers accomplished.
APA Citation:

Intended Audience:
The audience of the *American Journal of Veterinary Research* is practicing veterinarians and researchers in the veterinary field. The audience for this article is most likely practicing veterinarians.

**Activity of an injectable, sustained-release formulation of moxidectin administered prophylactically to mixed-breed dogs to prevent infection with dirofilaria immitis**

The main focus was the ability of moxidectin to effectively prevent a heartworm infection in dogs. Twenty-four dogs were administered moxidectin: one-third with a light dosage, one-third with the recommended dosage, and one-third with an over-dose. Eight other dogs were used as a control group, and were injected with saline solution. After the application of moxidectin or saline solution the dogs were then purposefully infected with heartworms. The infection process and preventive injections were administered throughout a 330-day trial. At the end of approximately 330 days, the animals were euthanized and a necropsy was performed. The control group had an average of 35.9 heartworms while only one of the moxidectin treated dogs showed any heartworms. The one dog that had heartworms was part of the group of low dosage moxidectin. The researchers concluded that following the recommended dosage was required for 100% effectiveness.

This study, unlike the previous, was highly controlled and eliminated as many biases as possible; the only concern would be the small size of the study. A more effective study would have included a larger number of dogs. This study leaves the reader hesitant to use the product because of the one dog that was infected. The effectiveness of the recommended dosage, however, is not questionable. The article indicates that, when used properly, injectable moxidectin is a viable alternative to an oral heartworm preventive. This research is helpful to researchers, who search for a longer lasting heartworm preventive, and practicing veterinarians, who want a dependable method to continually prevent heartworms, since an oral heartworm preventive is highly dependent on the dog owner’s use.